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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/703,828	11/01/2000	Raymond Kurzweil	11327-008001	4191
26161	7590	05/20/2005		
FISH & RICHARDSON PC 225 FRANKLIN ST BOSTON, MA 02110			EXAMINER BASOM, BLAINE T	
			ART UNIT 2173	PAPER NUMBER

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/703,828	KURZWEIL ET AL.
	Examiner	Art Unit
	Blaine Basom	2173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 22 November 2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-14, 16-29, 31 and 32 is/are rejected.
- 7) Claim(s) 15 and 30 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 01 November 2000 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### *Response to Arguments*

The Examiner acknowledges the Applicants amendments to claims 1 and 3. Regarding claim 1, the Applicants argue that Zasa (“The Angelic Beat Haiku Machine”), as described in the previous Office Action, fails to teach loading an “author analysis model.” The Examiner respectfully disagrees with this argument. As shown in the previous Office Action, and again below, Zasa presents the “Angelic Beat Haiku Machine,” which is a software program implemented on a computer to generate haikus. As taught by Zasa, this Angelic Beat Haiku Machine is associated with a “universe of words” that the computer draws from to fill in templates, and thus create original haikus. The templates and universe of words are skewed such that the resulting haikus resemble those of Jack Kerouac and other Beat Poets, as is further taught by Zasa. It is thus understood that an analysis of the writing style of Jack Kerouac and the other Beat Poets is necessitated to populate the universe of words and create the templates, so that the templates and universe of words are skewed such that the resulting haikus resemble those of Jack Kerouac and other Beat Poets. Consequently, as is concluded in the previous Office Action, the templates and universe of words disclosed by Zasa are believed to constitute an author analysis model like that of the present application; the templates and universe of words are derived from an analysis of Beat poem authors, and provide a pattern to generate the haikus of the Angelic Beat Haiku Machine. It is understood that, for the “Angelic Beat Haiku Machine” to access words from the universe of words and fill in templates, the universe of words must be loaded, i.e. placed into memory for processing. Accordingly, Zasa teaches to one of ordinary skill in the art loading an author analysis model.

Further regarding claim 1, the Applicants argue that Zasa, Gavron (Microsoft Windows NT Operating System), and Minkler (U.S. Patent No. 4,712,174), as described in the previous Office Action, fail to teach randomly selecting a seed word, and completing a poem based on the seed word. Again, the Examiner respectfully disagrees. As described in the previous Office Action, and again below, Zasa teaches randomly selecting words from the universe of words, considered an author analysis model. These words are placed into a template in order to generate poems. Minkler further teaches generating poems, but teaches selecting words to place into the poem based on other words in the poem (for example, words may be selected according to gender – see column 15, lines 42-58). It is therefore understood that, with Zasa and Minkler, when a word from the universe of words is chosen, it is selected so that it satisfies previously-selected or important words, which according to Zasa, may be randomly selected. Accordingly, Zasa and Minkler teach randomly selected a word, and completing a poem based on the word.

*Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 21, there is no antecedent basis for “the linked data structures.”

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6-15, 17-23, 25-30, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over “The Angelic Beat Haiku Machine,” as taught by Jay Zasa, over U.S. Patent No. 4,712,174, which is attributed to Minkler, II (and hereafter referred to as “Minkler”), and also over the Microsoft Windows NT 4.0 Operating System, as taught by Jacquelyn Gavron and Joseph Moran in the book entitled “How to Use Microsoft Windows NT Workstation” (which is hereafter referred to as “Gavron”). With respect to claim 1, Zasa presents “The Angelic Beat Haiku Machine” which is a software program that generates original haikus. According to Zasa, *My role was to provide raw materials that I felt might produce interesting results. So I built the templates, which were more complicated to design than you might think, and mindfully populated (and weighted) the universe of words that the computer draws from.*

*I chose the “Beat” theme because I thought the results might resemble Jack Kerouac’s formulation for the American Haiku: don’t count syllables, just write a short, vivid, three-line poem (also, building a generator that made strict 17-syllable haiku would have been considerably more difficult.) I tried to skew the database to give the haiku a “Beat” flavor by stressing the words that the Beat Poets favored – night, road, angel, eternity, tea, etc.*

Thus Zasa describes templates, whereby it is interpreted that words from a “universe of words” are input into these templates to generate haikus. The templates and the universe of words are skewed such that the resulting haikus resemble the poems of Jack Kerouac and other Beat Poets. Consequently, it is understood that when “The Angelic Beat Haiku Machine” is loaded to be executed, an author analysis model is also loaded, wherein this author analysis model comprises

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this universe of words and these templates, which are created from an analysis of Beat poem authors, and which provide resulting haikus that have a “Beat flavor.” Further regarding claim 1, Zasa states,

*There are other haiku generators out there, but they usually just pump out some poetry at random and then stop. What makes this one different is the fact that you can regenerate each line as many times as you want and then you decide when it is finished, so your own personal artistic judgment comes into play.*

Therefore “The Angelic Beat Haiku Machine” of Zasa creates poetry at random, but unlike other haiku generators, “The Angelic Beat Haiku Machine” allows a user to regenerate each line as many times as he or she desires. Since the haikus are created from templates, whereby it is interpreted that words from a universe of words are input into these templates, it is understood that randomly creating such haikus implies randomly selecting words from the universe of words and then inputting these randomly selected words into the templates. Zasa, however, does not explicitly teach randomly selecting a seed word, whereby as expressed in claim 1, a poem is completed *based* on this seed word using the author analysis model. Additionally, Zasa does not explicitly teach displaying this poem, as a screen saver, on an output device, as is recited in claim 1.

Like Zasa, Minkler presents a system for automatically generating a poem (see column 1, lines 5-10). Specifically regarding the claimed invention, Minkler teaches generating various portions of the poem based on a selected word or set of words (for example, see column 2, lines 1-31).

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Zasa and Minkler before him at the time the invention was made, to modify “The Angelic Beat Haiku Machine” taught by Zasa such that a seed word is randomly selected, but

like taught by Minkler, the haiku is completed based on this seed word. It would have been advantageous to one of ordinary skill to utilize such a combination because such poems appear more genuine, or in other words, such poems more appear as if they were created by a human rather than a computer, as is demonstrated by Minkler. Thus this combination of Zasa and Minkler teaches a method for generating a poem, the method being similar to that recited in claim 1. However, neither Zasa nor Minkler explicitly teach displaying this poem as a screen saver on an output device, as is recited in claim 1.

According to Gavron, Windows NT 4.0 offers a number of screen savers for a user, wherein these screen savers are displayed on the user's computer monitor (see page 130). Gavron also states that "screen savers are used primarily to give us (and passersby) something interesting and fun to look at while the computer is not in use" (see page 130).

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Zasa, Minkler, and Gavron before him at the time the invention was made, to modify "The Angelic Beat Haiku Machine" taught by Zasa and Minkler, such that it is implemented as a screen saver, like those taught by Gavron. This poem generator would consequently display a poem, as a screen saver, on a computer monitor. It would have been advantageous to one of ordinary skill to utilize such a combination because the resulting screen saver would provide something interesting and fun to look at while the computer is not in use, as is taught by Gavron.

Referring to claim 2, "The Angelic Beat Haiku Machine" of Zasa, as modified by the teachings of Minkler and Gavron, displays a poem as a screen saver on a computer monitor, i.e. display device, as is shown above.

With respect to claim 3, it is understood that “The Angelic Beat Haiku Machine” of Zasa, as modified by the teachings of Minkler and Gavron, is implemented on a computer. Such a computer typically has a central processing unit, a random access memory, a computer readable medium, and a display unit, as is known in the art. It is further understood that “The Angelic Beat Haiku Machine” of Zasa, as modified by the teachings of Minkler and Gavron, would reside on the computer readable medium and be executed by the central processor, as common in the art. As shown above, this “Angelic Beat Haiku Machine” automatically composes text based on a seed word, in the form of a poem, which appears on the display unit during screen saver mode. Consequently “The Angelic Beat Haiku Machine” of Zasa, as modified by the teachings of Gavron and Minkler, is considered a computer program product, and the computer implementing this “Angelic Beat Haiku Machine” is considered an automatic composition system like that of claim 3.

Regarding claim 11, “The Angelic Beat Haiku Machine” of Zasa, as modified by the teachings of Minkler and Gavron, presents the idea for automatically composing text, which appears as a poem on a display unit of a system during a screen saver mode entered into by the system, as is shown above in the rejection for claim 1. As further taught by Minkler, such text may be based on a user input word (for example, see column 2, lines 1-31).

As per claims 23 and 27, “The Angelic Beat Haiku Machine” disclosed by Zasa is a computer program that composes poetry. Consequently, “The Angelic Beat Haiku Machine” of Zasa, as modified by the teachings of Minkler and Gavron as described above in the rejection for claims 1 and 3, is considered equivalent to the computer program product recited in claims 23 and 27.

In reference to claim 4, “The Angelic Beat Haiku Machine” of Zasa, as modified by the teachings of Minkler and Gavron, automatically composes text, in the form of a poem, which appears on the display unit during screen saver mode, as is shown above.

As per claims 6, 17, and 25, Gavron discloses that Windows NT 4.0 includes a “display icon,” which when selected, results in the display of a “Display Properties” interface, i.e. window (see “step 2” on page 131). This window includes a “Screen Saver” tab, which when selected opens a dialogue box having an option to provide basic screen saver options, such as the length of time to wait before initiating screen saver mode (see “step 5” on page 131). Consequently, the combination of Zasa, Minkler, and Gavron, as described above, teaches selecting an interface that includes a screen saver interface option to open a dialogue box having an option to provide basic screen saver options including at least one of length of time to wait before initiating screen saver mode, and which corner of the screen moving a pointer device to point will initiate screen saver mode.

Referring to claims 7, 8, 9, 12, 18, 22, 26, and 32, “The Angelic Beat Haiku Machine” of Zasa composes haikus that resemble poems from Jack Kerouac and other Beat Poets by following the structure of the Beat Poets’ haikus – by not counting syllables, and by stressing words that these Beat Poets favored, as is shown above. Consequently, it is understood that one of ordinary skill in the art may apply these teachings to other forms of poetry, or even a specific poet personality, by using the structure and the words of the poems of the specific poet personality. As Windows NT 4.0 includes a screen saver interface option which provides a plurality of screen savers for users to chose from (see “step 3” on page 131 of Gavron), it is understood that the “The Angelic Beat Haiku Machine” of Zasa and Minkler, as modified by the

teachings of Gavron, may include screen savers from a plurality of poet personalities, and would therefore include a screen saver interface option to select from these poet personalities to generate the poems for the screen savers. Regarding claims 8 and 9, "The Angelic Beat Haiku Machine" of Zasa, uses the words from a plurality of Beat Poets to create a haiku that resembles those of the Beat Poets, as is shown above. Zasa also discloses that the universe of words from which "The Angelic Beat Haiku Machine" draws is weighted, supposedly to give priority to these Beat Poets' words over more common words, which results in the haikus having a "Beat flavor," as is shown above. Consequently, it is understood that one of ordinary skill in the art may apply these teachings to provide weights which give one Beat Poet's words priority over another Beat Poet's words, in fact prioritizing the plurality of Beat Poets, such that the resulting haiku more resembles a haiku of a Beat Poet having a higher priority than that having a lower priority. As Windows NT 4.0 includes a screen saver interface option which provides a plurality of basic screen saver options for users to chose from (see "step 3" on page 131 of Gavron), it is understood that "The Angelic Beat Haiku Machine" of Zasa, as modified by the teachings of Gavron, may include a screen saver interface option to open a dialogue box to activate a selected order of priority of using the poet personalities to generate the haikus, or wherein this order may also be a random or a user-specified sequence.

Regarding claim 10, Gavron discloses that Windows NT 4.0 includes a "Marquee Display" screen saver which, like "The Angelic Beat Haiku Machine" of Zasa, composes text on the computer screen (see "steps 3 and 4" on page 131). Moreover, Gavron discloses that Windows NT 4.0 includes a screen saver interface option to set the style of presentation of this text, wherein this style option involves background color, font color and size, scrolling

characteristics, and save options (see the "Marquee Setup" window above "step 4" on page 131). As Windows NT 4.0 includes a screen saver interface option which provides a plurality of screen savers for users to chose from (see "step 3" on page 131 of Gavron). Consequently, it is understood that the "The Angelic Beat Haiku Machine" of Zasa and Minkler, as modified by the teachings of Gavron, may include a screen saver interface option to set styles of presentation of the poems including at least one of background color, font color, font size, scrolling characteristics, and save options.

In reference to claims 13, 19, and 28, the universe of words disclosed by Zasa is "mindfully populated" and weighted so that the haikus composed by "The Angelic Beat Haiku Machine" resemble those of Beat Poets, as is shown above. For example, Zasa states that the words that the Beat Poets favored are stressed, such as night, road, angel, eternity, and tea. Thus it is understood that an analysis of one or more pre-existing compositions, i.e. poems, from these Beat Poets is necessitated in order to learn these favored words and populate the universe of words. The universe of words is considered a data structure. As is well known in the art, such a structure is generally linked in order to facilitate traversal of the structure. Thus the combination of Zasa, Minkler, and Gavron, as described above, teaches analyzing at least one pre-existing composition to generate linked data structures. Minkler further teaches that words based on a user input word, such as those relating to gender, are selected within such a data structure to generate a poem (see column 3, line 41 – column 4, line 3). The universe of words, being linked, facilitates this task. Consequently, the combination of Zasa, Minkler, and Gavron, as described above, also teaches generating a new composition from the data structures, i.e. universe of

words, by using the data structures to locate the user input word in the data structure to determine words based on the user input word that follow the user input word in the linked data structure.

With reference to claims 14, 20, and 29, the universe of words disclosed by Zasa is “mindfully populated” and weighted so that the haikus composed by “The Angelic Beat Haiku Machine” resemble those of Beat Poets, as is shown above. For example, Zasa states that the words that the Beat Poets favored are stressed, such as night, road, angel, eternity, and tea. It is understood that one of ordinary skill in the art may extend these teachings such that the universe of words not only includes words that the Beat Poets favored, but also various phrases, or common permutations of phrases, that the Beat Poets favored. Consequently, the universe of words, which is a linked data structure as shown above, may include 1-grams, bigrams, trigrams, and quadrigrams.

Claims 5, 16, 24, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Zasa, Minkler, and Gavron, which is described above, and also over U.S. Patent No. 6,091,411, which is attributed to Straub et al. (and hereafter referred to as “Straub”). As shown above, the combination of Zasa, Minkler, and Gavron presents a method and program product, like that of claims 1, 11, 23, and 27, for generating a computer-implemented poetry screen saver. In particular, this combination also teaches selecting an interface option that includes a screen saver interface option to open a dialogue box having an option to provide basic screen saver options, as is shown above in the rejection for claim 6. However, this combination of Zasa, Minkler, and Gavron does not disclose that these basic screen saver options include a link to a dialogue box having information on upgrading. In other words, the combination of

Zasa, Minkler, and Gavron does not explicitly teach the idea, which is expressed in each of claims 5, 16, 24, and 31, for selecting an interface option that includes a screen saver interface option to open a dialogue box having an option to provide a link to a dialogue box having information on upgrading.

Straub describes “themed enhancements” that alter the appearance and feel of an operating system graphical user interface by providing a group of resources, including a screen saver, that relate to a specific theme (see column 2, lines 40-55). Moreover, Straub teaches that such resources, including the screen saver, may be updated (see column 3, lines 49-52). Straub particularly states that “because the themed enhancements are recurrently updated, the themed enhancements are more likely to retain the user’s interest, as well as the timeliness of their information content” (see column 3, line 67- column 4, line 3).

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Zasa, Minkler, Gavron, and Straub before him at the time the invention was made, to modify the method taught by the combination of Zasa, Minkler, and Gavron, such that the screen savers created by “The Angelic Beat Haiku Machine” of Zasa and Gavron may be updated, like those taught by Straub. In other words, it would have been obvious to modify the method taught by Zasa, Minkler, and Gavron such that the basic screen saver options include a link to a dialogue box having information on upgrading, the basic screen saver options provided via the interface option that includes a screen saver interface option to open a dialogue box having an option to provide the basic screen saver options. It would have been advantageous to one of ordinary skill to utilize such a combination because the updated screen savers would be more likely to retain the user’s interest, as is taught by Straub.

***Allowable Subject Matter***

Claims 15 and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: Regarding each of these claims, automatically composing text, based on a user input word, is known in the art, as is analyzing pre-existing textual compositions to generate data structures comprising n-grams such as 1-grams and bigrams. Also known in the art is automatically composing a textual composition by using such data structures to determine appropriate words for the composition, specifically by locating a particular word in the data structure, and determining words that follow it in the data structure. However, the prior art does not specifically teach avoiding plagiarism while generating compositions in such a manner, specifically by examining weights represented in the data structures to avoid counts of words in the linked data structure that would repeat identical words from pre-existing compositions, as is recited in claims 15 and 30.

***Conclusion***

The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. The applicant is required under 37 C.F.R. §1.111(C) to consider these references fully when responding to this action. The Langkilde and Knight document cited therein teaches analyzing pre-existing compositions to generate a data structure comprising n-grams. This data structure may then be used to automatically generate textual

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compositions. The Gervas document cited therein describes a system for automatically generating poetry based on a literary style. The Chatfield, Donley, Dickey, and Marcus document cited therein describes various systems for automatically generating poetry. The Manurung, Ritchie, and Thompson document cited therein describes another system for automatically generating poetry.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blaine Basom whose telephone number is (571) 272-4044. The examiner can normally be reached on Monday through Friday, from 8:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (571) 272-4048. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

btb



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